

## Replace an ECU-8S Panel with an ECU-16 Base Card



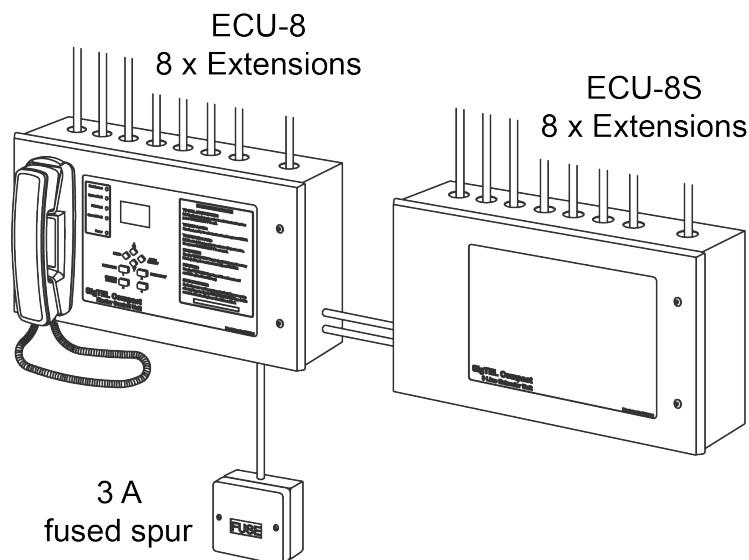
**THIS APPLICATION NOTE IS FOR A SUITABLY SKILLED AND TECHNICALLY COMPETENT PERSON AND SUMMARISES KEY INFORMATION PROVIDED IN THE MAIN INSTALLATION MANUAL (DOCUMENT NO. DAU0000091). IF IN DOUBT, READ THE FULL MANUAL. ENSURE ALL POWER IS REMOVED BEFORE STARTING WORK.**

The purpose of this application note is to replace an existing 16 line system comprising of two separate 8 line PCBs with a single 16 line Master PCB. Two suggested changeover methods are provided.

### Equipment required for this Application Note

16 Line Master Exchange PCB, terminal strip connector and necessary tools.

The assumed existing 16 line system is shown below:



### Existing Equipment (connected outstations not shown)

One ECU-8 Master Panel c/w two 12 volt 7 Ah batteries and one 3 A fused spur.

One ECU-8S Expansion Unit

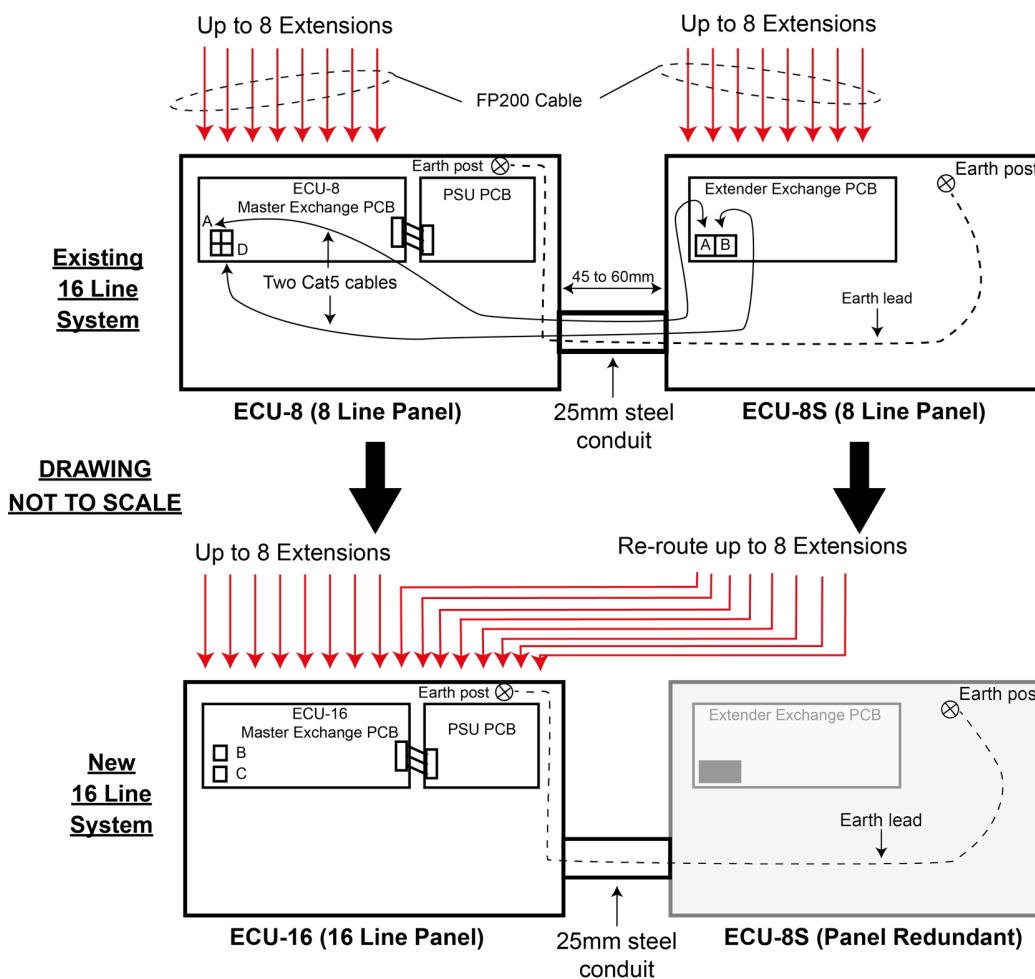
### Existing Interconnections

For each extension, 2-core, 1.0 mm<sup>2</sup> or 1.5 mm<sup>2</sup> enhanced fire-rated cable, e.g. FP200.

Between the ECU-8 and the ECU-8S, two Cat5 cables protected by 25 mm steel conduit.

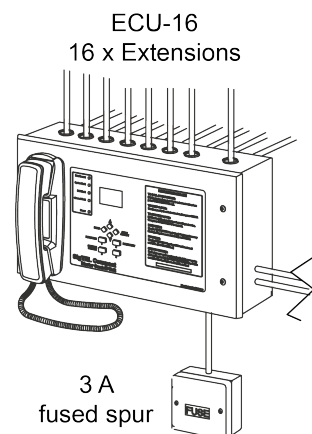
E&OE. No responsibility can be accepted by the manufacturer or distributors of these power supplies for any misinterpretation of this instruction, or for the compliance of the system as a whole. The manufacturer's policy is one of continuous improvement and we reserve the right to make changes to product specifications at our discretion and without prior notice.

### Suggested Changeover Method 1

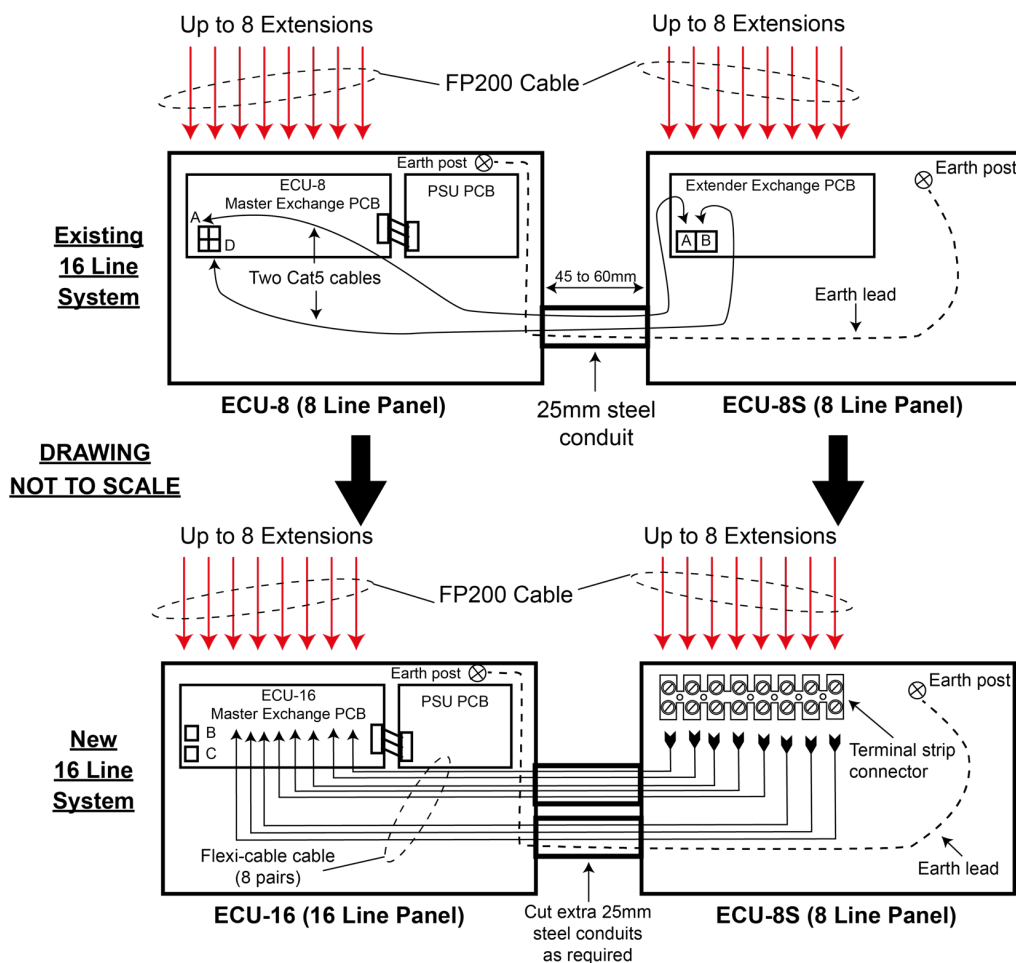


**Suggested Changeover Method 1: Refer to the diagram above and follow the steps listed below:**

1. Ensure Mains power is isolated and the batteries are disconnected at the ECU-8.
2. Disconnect and remove the two Cat5 cables between the ECU-8 and ECU-8S. DO NOT disconnect the earth lead. Dispose of Cat5 cables.
3. At ECU-8: Disconnect extensions from the ECU-8 Master Exchange PCB.  
 Disconnect and remove the ECU-8 Master Exchange PCB, PSU PCB and panel lid. Dispose of the ECU-8 Master Exchange PCB.  
 Remove extra knockouts to accommodate the additional ECU-8S extensions.  
 Install and reconnect the new ECU-16 Master Exchange PCB and PSU PCB.  
 Reconnect extensions to the ECU-16 Master Exchange PCB.
4. At ECU-8S: Disconnect extensions from the Extender Exchange PCB.  
 Re-route and terminate extensions via the knockouts to the ECU-16 Master Exchange PCB.
5. Refit panel lid and re-apply mains & battery power (example shown right).



*Application Note 0012.0 details a method of using a junction box when wiring FP200 cable to an ECU-16 panel.*

**Suggested Changeover Method 2**

**Suggested Changeover Method 2: Refer to the diagram above and follow the steps listed below:**

1. Ensure Mains power is isolated and the batteries are disconnected at the ECU-8.
2. Disconnect and remove the two Cat5 cables between the ECU-8 and ECU-8S. DO NOT disconnect the earth lead. Dispose of Cat5 cables.
3. Disconnect extensions from the ECU-8 Master Exchange PCB.
4. Disconnect and remove the ECU-8 Master Exchange PCB, PSU PCB and panel lid. Dispose of the ECU-8 Master Exchange PCB.
5. Disconnect extensions from the ECU-8S Extender Exchange PCB.
6. Remove the ECU-8S Extender Exchange PCB and panel lid. Dispose of the ECU-8S Extender Exchange PCB.
7. Cut out extra holes in the sides of the ECU-8 and ECU-8S back boxes and fit steel conduits large enough to accommodate the additional ECU-8S extensions.
8. At ECU-8: Install and reconnect the new ECU-16 Master Exchange PCB and PSU PCB.
9. At ECU-8S: Install a terminal strip connector and terminate the ECU-8S extensions to this connector.
10. Using flexi-cable connect up to 8 pairs from the connector in the ECU-8S to the ECU-16 Master exchange PCB. Route cables through the 25mm steel conduits previously fitted in step 7.
11. Terminate all extensions to the ECU-16 Master Exchange PCB.
12. Refit panel lids and re-apply mains and battery power.